

REMARKS

Claims 1 - 4, 7 - 26, and 29 - 43 are pending. Claims 5-6 and 27-28 have been previously cancelled without prejudice. Claims 1, 7-11, 14, 20-21, 25 and 39 have been amended. Support for the amendments made is provided in the specification originally filed as further described in detail below.

Thus, because the claim amendments are fully supported by the originally filed specification, no new matter is introduced.

Allowable Subject Matter

Applicants thank the Examiner for indicating that claims 14-18 and claims 22-26, and 29-30 represent allowable subject matter as indicated at page 10 of the Office Action.

Claim Objections Against Claims 1, 7, 9-11, 14, 20 and 21

Claims 1, 7, 9-11, 14, 20 and 21 are objected to for the reasons noted at pages 2-3 of the Office Action. In response, Applicants have amended these claims to overcome the objections of record with respect to claims 1, 7, 9-11, 14, 20 and 21.

Specifically, claims 1, 7, 9-11, 14, 20 and 21 are amended as follows:

1. (Currently Amended) Apparatus including:

a first component defining a first passage;

a second component connectable with the first component and defining a second passage, said passages being aligned when the components are connected to each other;

a rotatable locking pin having formations and a retaining element having engaging formations ~~complementary to the said formations~~ and each configured for being accommodated in the aligned passages, the rotatable locking pin being rotatable relative to the components ~~when accommodated in the aligned passages between~~

a locked position in which the ~~engaging~~ formations of the locking pin engage at least one of the ~~complementary engaging formations of the retaining element~~ so as to prevent withdrawal of the locking pin from the aligned passages and to prevent separation of the components, and

a free position in which the pin is slidably removable from the aligned passages to permit separation of the components,

wherein said ~~the complementary~~ formations of the pin are at least partly disposed along a circumference of the pin, and

wherein the pin is configured so that said formations interlock with the engaging formations of the retaining element ~~interlock with the complementary formations of the pin~~ as the pin is rotated from the free position to the locked position to prevent separation of the first and second components.

* * *

7. (Currently Amended) Apparatus according to claim ~~6~~1, wherein the pin has an axis of rotation and rotation of the pin around that axis moves the pin between the locked position and the free position and one end of the pin along the axis rests on a part of the first or the second component.

* * *

9. (Currently Amended) Apparatus according to claim 8, wherein the ~~complementary~~ formations include land areas that are substantially flat.

10. (Currently Amended) Apparatus according to claim 8, wherein the ~~complementary~~ formations include land areas that are substantially concave.

11. (Currently Amended) Apparatus according to claim 1, wherein the ~~complementary~~ formations form a helical corkscrew about the pin so that rotation of the pin from the free position to the locked position in one direction draws the pin further into the aligned passages, and upon rotation of the pin in the opposite direction from the locked position to the free position drives the pin out of the aligned passages.

* * *

14. (Currently Amended) Apparatus according to claim 13, wherein the pin further comprises a withdrawal recess ~~which~~ and said withdrawal recess is displaced longitudinally on a circumference of the pin and apart from the insertion recess, which withdrawal recess permits withdrawal of the pin from the aligned passages, when the withdrawal recess is aligned with the retaining element.

* * *

20. (Currently Amended) Apparatus according to claim 19, wherein ~~the said component that includes said retaining element further includes resilient means for allowing said resilient movement of said part of the retaining element is resilient and allows said resilient movement, while urging said part against the pin.~~

21. (Currently Amended) Apparatus according to claim 20, wherein ~~retaining element further includes a resilient element, the said resilient element including includes~~ an elastomeric support and an engagement element, and wherein the engagement element of the retaining element abuts the elastomeric support.

With respect to the pending claims, the claims have been amended as necessary to recite proper grammar, spelling, and/or antecedent basis as further indicated in the Listing of the Claims section of this paper.

For example, typographical errors in claim 1 have been corrected as reproduced above and as also recited in the Listing of the Claims section of this paper.

To provide clarity by way of a non-limiting illustrative example, claim 1 (as amended) is reproduced below together with reference numerals from Applicants' non-limiting drawing figures – with the understanding that the below noted claim with reference numerals is only a non-limiting illustrative embodiment of the claimed invention:

1. (Currently Amended) Apparatus including:

a first component (2) defining a first passage (7);

a second component (3) connectable with the first component (2) and defining a second passage (10), said passages ((7) and (10) or aligned passage (11)) being aligned when the components ((2) and (3)) are connected to each other;

a rotatable locking pin (12) having formations (22) and a retaining element (15) having engaging formations (20) ~~complimentary-complementary~~ to the said formations (22) and each configured for being accommodated in the aligned passages ((7) and (10) or aligned passage (11)), the rotatable locking pin (12) being rotatable relative to the components ((2) and (3)) when accommodated in the aligned passages ((7) and (10) or aligned passage (11)) between

a locked position (e.g., see Fig. 12) in which the engaging formations (22) of the locking pin (12) engage at least one of the ~~complimentary-engaging~~ formations (20) of the retaining element (15) so as to prevent withdrawal of the locking pin (12) from the aligned passages ((7) and (10) or aligned passage (11)) and to prevent separation of the components ((2) and (3)), and

a free position (e.g., see Fig. 13) in which the pin (12) is slidably removable from the aligned passages ((7) and (10) or aligned passage (11)) to permit separation of the components ((2) and (3)),

wherein said ~~the complimentary~~ formations (22) of the pin (12) are at least partly disposed along a circumference of the pin (12), and

wherein the pin (12) is configured so that said formations (22) interlock with the engaging formations (20) of the retaining element (15) ~~interlock with the complimentary formations of the pin as the pin (12) is rotated from the free position (e.g., see Fig. 12) to the locked position (e.g., see Fig. 13)~~ to prevent separation of the first (2) and second (3) components.

Specifically, where the term “formations” should have been used instead of the term “engaging formations”, such typographical error correction has been made. Likewise, where the term “engaging formations” should have been used instead of the term “complimentary formations”, such typographical error correction has been made. The spelling of “complimentary” has been corrected to “complementary.”

Also for improved clarity, the term “so that the engaging formations of the retaining element interlock with the complimentary formations of the pin as the pin is rotated . . .” is replaced with the term “so that said formations interlock with the engaging formations of the retaining element as the pin is rotated . . .” as recited in amended claim 1.

Thus, in view of the foregoing amendments to the claims to correct obvious typographical errors, grammar and/or to improve readability, Applicants respectfully request reconsideration and withdrawal of the above-noted objections of record including those raised against claims 1, 7, 9-11, 14, 20 and 21.

Claim Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 8, 20 – 26 and 29 – 30 have been rejected under 35 USC § 112, second paragraph, for the reasons noted at pages 3-4 of the Office Action.

In response, Applicants have amended claims 8, 20-26 and 29-30 as noted below:

8. (Currently Amended) Apparatus according to claim ~~7~~1, wherein upon rotating the retaining element locking pin rotates into the locked position along a retaining element axis so as to engage interlock with the pin retaining element, the engagement between the locking pin and the retaining element prevents (a) withdrawal of the locking pin from the aligned passages and (b) withdrawal of the locking pin away from the retaining element between the locked position and the free position and one end of the retaining element along the retaining element axis rests on a part of the first or second component.

* * *

20. (Currently Amended) Apparatus according to claim 19, wherein ~~the said component that includes said retaining element further includes resilient means for allowing said resilient movement of said part of the retaining element is resilient and allows said resilient movement, while urging said part against the pin.~~

21. (Currently Amended) Apparatus according to claim 20, wherein ~~retaining element further includes a resilient element, the said resilient element including includes an elastomeric support and an engagement element, and wherein the engagement element of the retaining element abuts the elastomeric support.~~

22. (Previously Presented) Apparatus according to claim 21, wherein the support defines a channel in which the engagement element is received.

23. (Previously Presented) Apparatus according to claim 22, wherein the support and engagement element are bonded to each other.

24. (Previously Presented) Apparatus according to claim 22, wherein the support defines a deformation passage extending substantially parallel to said support, to facilitate resilient deformation of the support.

25. (Currently Amended) Apparatus according to claim 21, wherein the engagement element is castellated so as to define a plurality of said engaging formations, each of which engages said pin when the pin is in the locked position.

26. (Previously Presented) Apparatus according to claim 20, wherein said retaining element has a hole having a closed end and an opposite open end, said engaging formation being located within said hole, the engaging formation or engagement element being movable along said hole and abutted against said resilient element, and protruding through said open end.

* * *

29. (Previously Presented) Apparatus according to claim 26, wherein the resilient element is constituted by an elastomeric material.

30. (Previously Presented) Apparatus according to claim 26, wherein the retaining element includes a plurality of said holes and a plurality of said engaging formations.

With respect to claim 8, Applicants point out that the language of amended claim 8 expressly recites that the locking pin cannot be withdrawn and/or removed from the aligned passages when the locking pin is in the locked position. Claim 8 also expressly recites that the locking pin cannot be withdrawn and/or separated away from the retaining element when the locking pin is in the locked position. Support for the same is provided in the specification as originally filed. See for example, paragraphs [0061] and [0066] – regarding the non-limiting illustration of Fig. 12 (free position), and paragraphs [0059] and [0057] – regarding the non-limiting illustration of Fig. 13 (locked position). A more detailed discussion of Applicants' Figs. 12 and 13 is provided hereinbelow in the context of the rejection of certain claims under 35 USC § 102(e). Nevertheless, in view of the foregoing support provided in Applicants' specification originally filed, no new matter is introduced by any of the claim amendments made.

Applicants thank the Examiner for pointing out the typographical errors previously present in claim 8 which have now been corrected as noted above.

Regarding amended claim 20, such claim has been amended to delete the term “said retaining element further includes resilient means for allowing said resilient movement of” to render the issue of the recitation of such deleted term now moot.

Likewise, with respect to amended claim 21, such claim has been amended to delete the term “retaining element further includes a resilient element, the” to render the issue of the recitation of such deleted term now moot.

Claim 25 has been amended to insert the word “said” immediately before the term “engaging formations” as noted above and in the Listing of the Claims section of this paper.

Furthermore, in view of the dependency of claims 22-26 and 29-30 on claims 20 and 21 (as recited in claims 22-26 and 29-30), the amendments to claims 20 and 21 apply equally to claims depending therefrom.

Accordingly, in view of the claim amendments made, Applicants respectfully request reconsideration and withdrawal of the rejections of record under 35 USC § 112, second paragraph, as applied against claims 8, 20 – 26 and 29 – 30.

Claim Rejections Under 35 USC § 102(e)

Claims 1-4, 7, 9-13, 19 and 31-43 are rejected under 35 USC § 102(e) as being anticipated by U.S. Pat. No. 6,757,995 (hereinafter “Pippins”) for the reasons noted at pages 4-9 of the Office Action. Applicants respectfully traverse this rejection for the reasons noted below.

In particular, of these rejected claims, claims 1 and 39 are independent claims with the remaining pending claims being dependent claims ultimately depending upon independent claim 1 or upon independent claim 39.

As currently amended, independent claim 1 recites the following language reproduced (in part) below:

1. (Currently Amended) Apparatus including:

* * *

a rotatable locking pin having formations and a retaining element having engaging formations ~~eomplimentary~~ complementary to the said pin formations and each configured for being accommodated in the aligned passages, the rotatable locking pin being rotatable relative to the components when accommodated in the aligned passages between

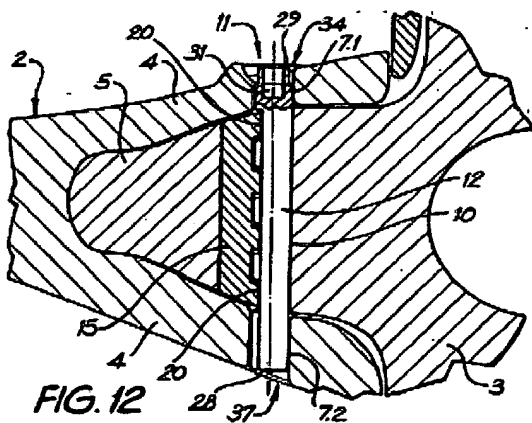
a locked position in which the engaging formations of the locking pin engage at least one of the ~~eomplimentary~~ engaging formations of the retaining element so as to prevent withdrawal of the locking pin from the aligned passages and to prevent separation of the components, and

a free position in which the pin is slidably removable to permit separation of the components, . . .

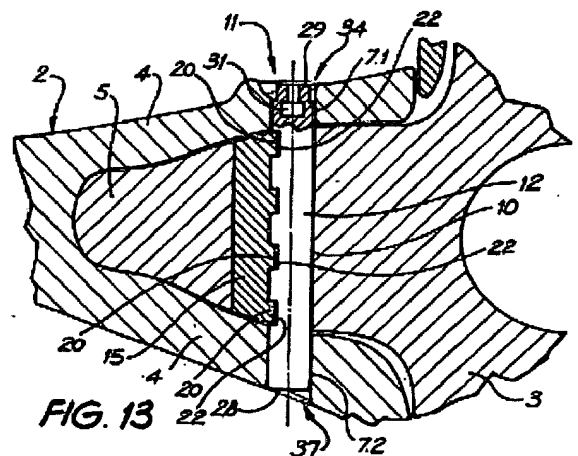
* * *

[(Double underlining emphasis added; strikeout and single underlining indicating the claim amendments made with respect to the partial claim language recited above from claim 1.)]

To put the foregoing emphasized language (double underlined and bolded) in context, the Examiner is respectfully directed to the non-limiting illustrations of Applicants' drawing Figures 12 and 13 in which Figure 12 depicts a free position and Figure 13 depicts a locked position:



Non-limiting Illustration of Free Position



Non-limiting Illustration of Locked Position

A description of non-limiting illustrative Figure 12 regarding the free position (to slide the pin out and/or withdraw same) and the non-limiting illustrative advantages of the same are described in Applicants' specification originally filed as reproduced below:

[0061] FIG. 12 illustrates the [e.g., engaging] formations 20 being outside the slots [(e.g. formations)] 22 of the [e.g., locking] pin 12, when the pin is in the free position. [Applicants' specification as originally filed with reference to paragraph [0061] at page 5 of US 2006/0078373 A1; double underlining emphasis added.)]

* * *

[0066] As the pin 12 can slide relatively easily into aligned passages 11 and then be rotated to the locked position, the need to hammer the pin in place, as required in prior art pins, is avoided. This, in turn, avoids the dangers associated with such hammering, including metal fragments[,] breaking off the pin or hammering tool which could cause injury that would be caused by the hammering action. When it is desired to remove the pin 12 to separate tooth 2 and adaptor 3 from each other, for example where the tooth has worn down and needs to be replaced, the action of rotating the pin 12 from the locked position to the free position, and then sliding the pin from the aligned passages 11, has similar advantages. [Applicants' specification as originally filed with reference to paragraph [0066] at page 5 of US 2006/0078373 A1; double underlining emphasis added.)]

A description of non-limiting illustrative Figure 13 regarding the locked position preventing removal and/or withdrawal of pin 12 (when in the locked position) and preventing separation of tooth 2 and adaptor 3 (when in the locked position) is described in Applicants' specification originally filed as reproduced below:

[0059] FIG. 13 illustrates the location of [e.g., engaging] formations 20 within the slots [(e.g., formations)] 22 of the [e.g., locking] pin 12 when the pin is in the locked position. [Applicants' specification as originally filed with reference to paragraph [0059] at page 4 of US 2006/0078373 A1; double underlining emphasis added.)]

* * *

[0057] ... The [e.g., locking] pin 12, when in this [(e.g., locked)] position, is prevented, by engagement of the [e.g., engaging] formations 20 with the walls 21 of the respective slots [(e.g., formations)] 22, from being slid out of the aligned passages 11. Thus the pin 12, when in this [(e.g., locked)] position, also serves to prevent separation of the tooth 2 and adaptor 3. This position of the pin 12, in which it cannot be withdrawn, may be considered as a 'locked position'. [Applicants' specification as originally filed with reference to paragraph [0057] at page 4 of US 2006/0078373 A1; double underlining emphasis added.)]

The foregoing non-limiting description of the illustrative non-limiting embodiments of Figures 12 and 13 provided in Applicants' specification originally filed makes the following non-limiting illustrative points abundantly clear:

- (1) when the locking pin is in the free position, it can be slid out of and/or withdrawn from the aligned passages and can be withdrawn away from the retaining element;
- (2) when the locking pin is in the locked position, it cannot be slid out of and/or withdrawn from the aligned passages or cannot be separated and/or withdrawn away from the retaining element due to the interlocking engagement between the formations 22 (of the locking pin 12) and the engaging formations 20 (of the retaining element 15), for example; and
- (3) when the locking pin is in the free position, it is not necessary to use a hammering tool to remove the locking pin which avoids the dangers and/or disadvantages associated with the use of a hammering removal tool, for example.

In view of such non-limiting illustrative description of non-limiting embodiments of Figures 12 and 13, the language of amended claim 1 reciting:

1. (Currently Amended) Apparatus including:

* * *

a rotatable locking pin having formations and a retaining element having engaging formations ~~complementary-complementary~~ to the said pin formations and each configured for being accommodated in the aligned passages, the rotatable locking pin being rotatable relative to the components when accommodated in the aligned passages between

a locked position in which the engaging formations of the locking pin engage at least one of the ~~complementary-engaging~~ formations of the retaining element so as to prevent withdrawal of the locking pin from the aligned passages and to prevent separation of the components, and

a free position in which the pin is slidably removable from the aligned passages to permit separation of the components, . . .

* * *

is clarified for the benefit of the U.S. Patent and Trademark Office's (USPTO's) understanding of claim 1 reciting the term "a locked position" and reciting the term "a free position." (Emphasis added.)

To that end of providing a better appreciation and/or better understanding of the recited terms "a locked position" and "a free position", it is noted that when the locking pin is in the locked position, the locked position operates "to prevent withdrawal of the locking pin from the aligned passages" and that when the locking pin is in the free position, the locking pin can be slid out of the aligned passages and/or

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withdrawn away from the retaining element to decouple/separate the components. (Double underlining and bold emphasis added.) In fact, the decoupling/separation of the components from the free position after slidably removing the locking pin does not require the use of a hammering tool as required by Pippins and as described in further detail hereinbelow.

Given the foregoing understanding of claim 1 (and therefore that of its dependent claims, by virtue of the relevant claim dependency), Applicants now direct the Examiner's attention to independent claim 39 that recites in relevant part:

39. (Currently Amended) A method of releasably interlocking a first component and a second component, wherein the first component defines a first passage and the second component defines a second passage, the method including the steps of:

connecting the first component to the second component so that the first and second passages are aligned with each other;

providing in one of said components a retaining element;

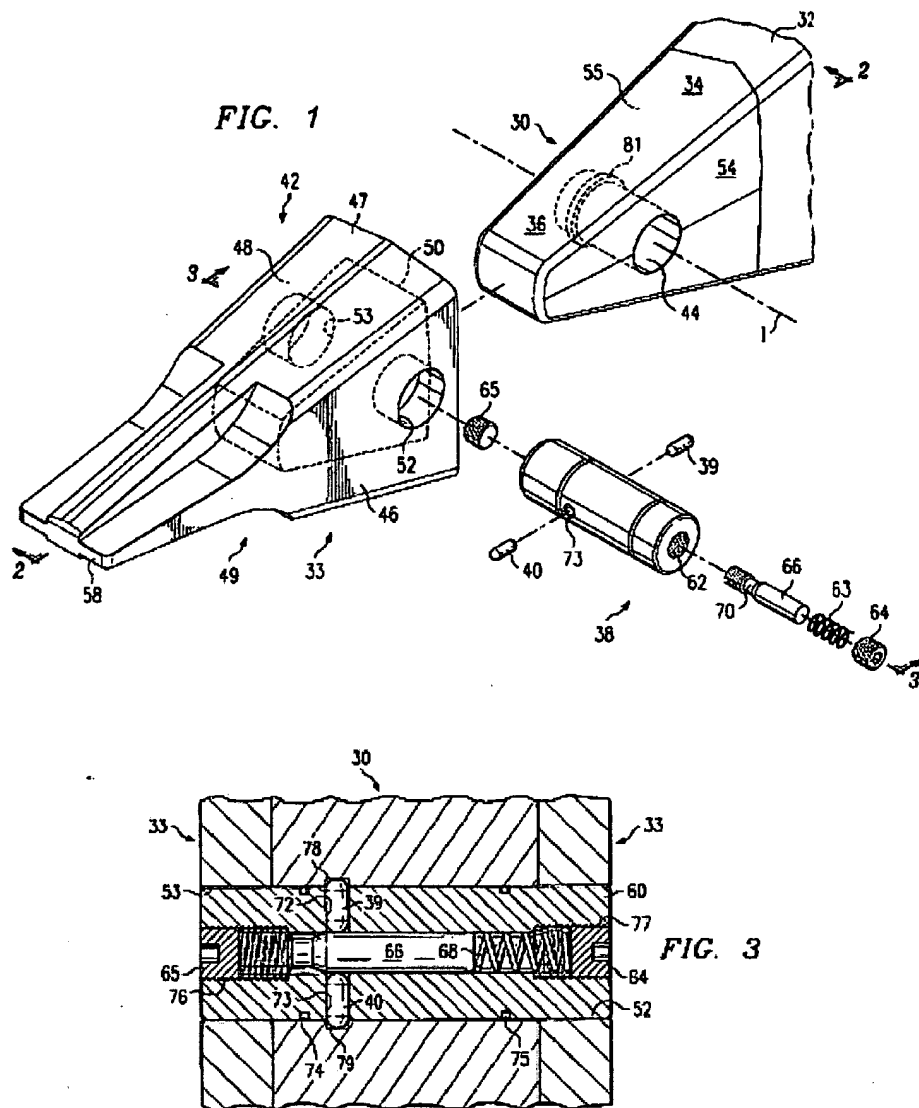
inserting a pin, which has a pair of spaced walls at least partly defining a circumferentially extending slot for engagement with said retaining element, into the aligned passages so that, when so inserted, the pin is in a free position in which it is free to be selectively withdrawn from the aligned passages; and

rotating the pin relative to the components, from the free position to a locked position so that said retaining element interlocks with said slot defined by the pair of spaced walls to thereby prevent withdrawal of the pin from the aligned passages and hence to prevent separation of the components. [(Double underlining and bold emphasis added.)]

Applicants' foregoing non-limiting and illustrative description in relation to the non-limiting illustrative embodiments of Figures 12 and 13 are equally applicable to the double underlined and bolded language of claim 39 emphasized above without having to repeat the same here. Suffice it to state that when the locking pin is in the locked position, the locking pin cannot be withdrawn from the aligned passages and/or cannot be withdrawn away from the retaining element. The foregoing understanding of claim 39 also applies equally to claims depending therefrom.

Provided with such understanding described above, the fatally flawed deficiencies (in relation to the lack of adequate relevant disclosure, teaching or suggestion therein as applied in support of the 35 USC § 102(e) rejection) of the Pippins reference are set forth below.

In particular, the Pippins reference illustrates in FIG. 1 thereof internal bore 44 having an imaginary axis I, and openings 52 and 53 that may be aligned in the fashion illustrated in FIG. 3 thereof:



Within the passage (of bore 44 and openings 52 and 53) is inserted a retainer pin body 60 (of retainer pin 38) with cylindrical valve 66 also inserted therein (inside retainer pin body 60 of retainer pin 38) as depicted in FIG. 3 of Pippins.

As illustrated in FIG. 3 of Pippins, detents 39 and 40 extend through retainer pin body 60 (of retainer pin 38) via cavities 72 and 73 and extend into notched openings 78 and 79 (which are a part of cylindrical groove 81 – shown in FIG. 1 within bore 44) as depicted and described in Pippins:

Therefore, since detents 39 and 40 contact [(e.g., rest upon) internal] valve 66 at the larger diameter portion (relative to the reduced diameter neck 70)[,] detents 39 and 40 are maintained in place within cavities 72 and 73. [(Pippins at col. 5, lines 14-17; double underlining emphasis added.)]

* * *

Detents 39 and 40 extend from cylindrical bore 62, through cavities 72 and 73, which are formed within retainer pin 38 and extend from internal bore 44. Detents 39 and 40 contact adapter 30 adjacent cavities 72 and 73, respectively, at notched openings 78 and 79 formed in adapter 30. In the illustrated embodiment, notched openings 78 and 79 are part of a cylindrical groove 81 formed on an interior surface of adapter 30 adjacent internal bore 44. Each detent also contacts valve 66, which maintains each detent 39 and 40 in place at least partially within notched openings 78 and 79, respectively. In this manner, retainer pin 38 is prevented from shifting relative to adaptor 30. Furthermore, cooperation between retainer pin 38 and removable tooth 33, [and] adjacent openings 52 and 53, prevent decoupling of removable tooth 33 and adapter 30. [(Pippins from col. 4, line 56 to col. 5, line 3; double underlining emphasis added.)]

From the foregoing description together with the depiction in FIGS. 1 and 3 of Pippins, it is clear that retention of detents 39 and 40 resting on the larger diameter portion of valve 66 (within retainer pin 38) together with extension of the detents 39 and 40 into notched openings 78 and 79 provides that the “retainer pin 38 is prevented from shifting relative to adapter 30” as recited in the above-quoted language of Pippins.

However, the valve 66 held within retainer pin 38 can be removed and/or withdrawn from retainer pin 38 even with detents 39 and 40 resting on the larger diameter portion of valve 66 (relative to the narrower neck portion 70) and extending into notched openings 78 and 79 – as depicted in FIG. 3 of Pippins.

In other words, even when the detents 39 and 40 are disposed as depicted in the so-called “locked” position of FIG. 3 of Pippins, the valve 66 can be readily removed and/or withdrawn from the internal portion of retainer pin 38 in the following manner:

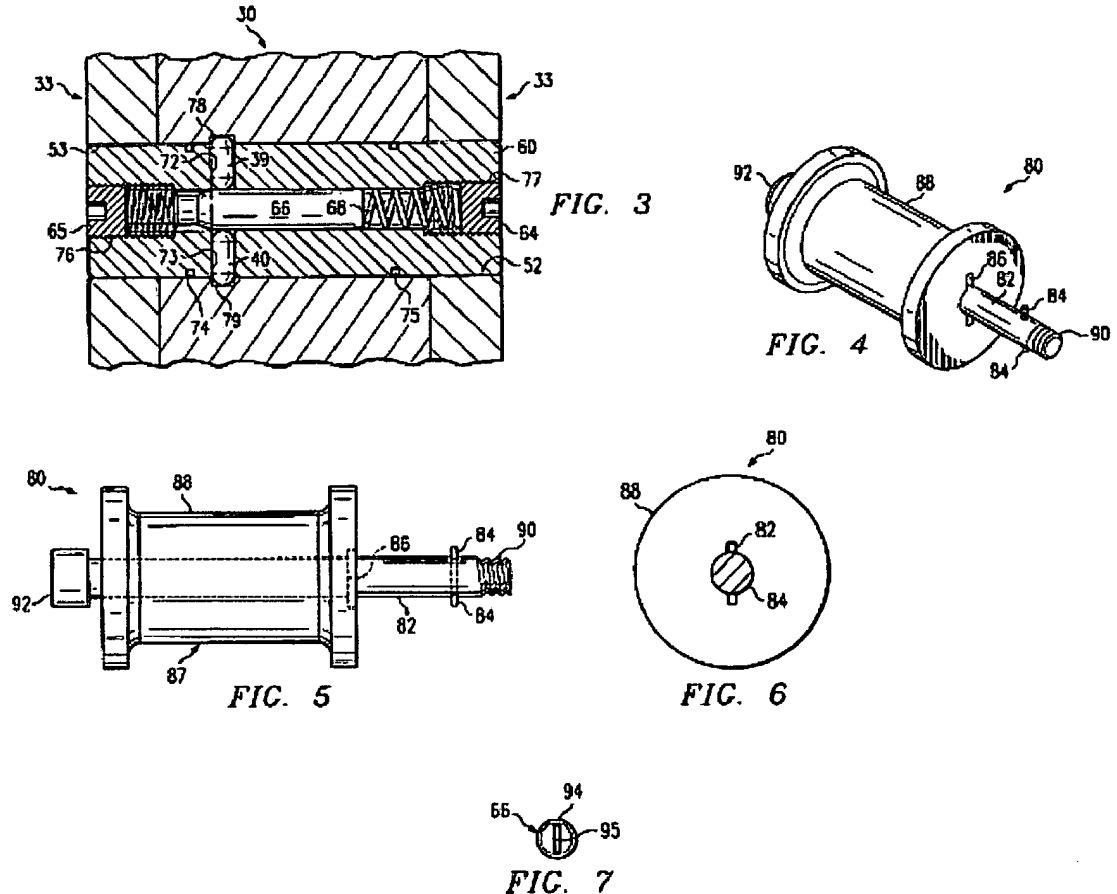
- (a) remove and/or withdraw (e.g., unscrew) threaded plug 65 from the left end of retainer pin body 60 (see left side of FIG. 3 of Pippins reproduced above);
- (b) insert screwdriver in slot 95 of valve 66 (see FIG. 7 of Pippins); and
- (c) remove and/or withdraw (e.g., unscrew) valve 66 to laterally pull out same along imaginary axis I to the left side (out of the same side as the side on which opening 53 is depicted in FIG. 3 of Pippins reproduced above) from retainer pin body 60 of retainer pin 38.

Accordingly, it is clear that the so-called “locking” pin (valve 66 of Pippins) can be removed and/or can be withdrawn as described above even when in the so-called “locked” position.

Therefore, even if the so-called “locking” pin (valve 66 of Pippins) is in the so-called “locked” position – as illustrated in FIG. 3 of Pippins with detents 39 and 40 extended into notched openings 78 and 79, such so-called “locked” position (of Pippins) does not “prevent withdrawal of the locking pin from the aligned

passages". Such deficiency of Pippins is directly contrary to the expressly recited language (see the double underlined and bolded claim language quoted above) recited in both rejected independent claims 1 and 39.

To substantiate the foregoing deficiency of Pippins, the following relevant text and FIGS. from Pippins is/are quoted and reproduced below (with respect to FIGS. 3-7 of Pippins):



In order to decouple removable tooth 33 and adapter 30, plug 65 is rotated and threadably removed from cylindrical bore 62. A removal tool, such as tool 80 illustrated in FIGS. 4 and 5, is threadably coupled with retainer pin 38. [(Pippins at col. 5, lines 31-34; underlining emphasis added.)]

* * *

As weighted member 88 is rotated, threaded end 90 approaches valve 66, and eventually engages valve 66. Threaded end 90 and valve 66 are provided with corresponding surfaces, such that threaded end 90 can engage valve 66 and rotate valve 66 as weighted member 88 is rotated. For example, valve 66 may be provided with a slot 95 (see FIG. 7) appropriate to receive a standard screwdriver-type head, and threaded end 90 may be provided with such a screwdriver-type head. [(Pippins at col. 6, lines 1-9; underlining emphasis added.)]

* * *

Each of plugs 64 and 65, and valve 66 include threaded portions configured to cooperate with threaded portions 76 and/or 77 in order to install or[] remove such components [(i.e., 64, 65 and 66)] from retainer pin 38 [(i.e., even when the detents 39 and 40 and in the so-called “locked” position as described in the remarks in this paper)]. Accordingly, each of plugs 64 and 65, and valve 66 include a screw-type head similar to a screw head 94 shown in FIG. 7. [(Pippins at col. 6, lines 29-34; underlining emphasis added.)]

Screw head 94 also includes at least one groove 95, which is configured to cooperate with a tool [(e.g., a screw-driver or other equivalent tool)] to extend or retract the corresponding component [(e.g., plug 65, and valve 66)] to/from the installed position [(e.g., from the center of retainer pin 38)] within cylindrical bore 62. Groove 95 may be configured to cooperate with simple hand tools, such as a screwdriver or power drill head. Accordingly, groove 95 may include a standard or Phillips head-type screw receptacle. . . . The configuration [of groove 95] is generally selected to cooperate with one or more hand or power tools to allow for the removal of secondary retainer pin 38 [(or removal of valve 66 by itself because such so-called “locked” configuration would permit same even when detents 39 and 40 are extended into notched ends 78 and 79 because detents 39 and 40 so extended do not prevent withdrawal or removal of valve 66 using a screwdriver after removal of plug 65 of FIG. 3 of Pippins)] from cylindrical bore 62. [(Pippins at col. 6, lines 36-52; underlining emphasis added.)]

In view of the above-quoted language, the disclosure, teaching or suggestion of Pippins corroborates that when the so-called “locking” pin (valve 66) is in the so-called “locked” position (with detents 39 and 40 extending into openings 78 and 79), the so-called “locked” position of Pippins cannot operate to “prevent withdrawal of the locking pin from the aligned passages” which is directly contrary to the expressly recited language (see the double underlined and bolded claim language quoted above) found in both rejected independent claims 1 and 39 because detents 39 and 40 cannot operate to prevent unscrewing plug 65 followed by unscrewing (e.g., withdrawal) of valve 66 using a simple screwdriver with a head matched to groove 95 to unscrew and remove or withdraw valve 66 by itself from the inside of retainer pin 38. (Double underlining and bold emphasis added to emphasize language expressly recited in Applicants’ rejected claims 1 and 39.)

Likewise, when the so-called “locking” pin (valve 66) is in the so-called “locked” position (with detents 39 and 40 extended into notched openings 78 and 79 and resting on the larger diameter portion of valve 66), even then this so-called “locked” position does not prevent the withdrawal of valve 66 away from the retainer pin 38.

Moreover, as indicated in the Pippins reference, Pippins requires the use of a hammer-like removal tool 80 provided with a weighted member 88 and threaded end 90 to engage valve 66 and move valve 66 toward plug 64 to align neck 70 of valve 66 in line with detents 39 and 40 into the so-called “free” position. In particular, even in such so-called “free” position, Pippins requires the use of the hammer-like removal tool 80 to dislodge the

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retainer pin 38 out of internal bore 44 (of adapter 30) and out of openings 52 and 53 (each of removal tooth 33). Pippins requires the use of the hammer-like removal tool 80 to compensate for the friction, jamming, dirt or particle infiltration, corrosion, bending, wear and tear of the various parts (e.g., retainer pin 38, detents 39, 40, internal bore 44, openings 52, 53, valve 66), and/or spatial orientation – (horizontal or vertical orientation or somewhere in between of detents 39, 40 – in relation to the natural gravitational force applied to detents 39, 40, etc.) so as to withdraw detents 39, 40 from the notched openings 78 and 79 and then to dislodge the retainer pin 38 from adapter 30 and removable tooth 33. So, even when the Pippins apparatus is in the so-called “free” position, the retainer pin 38 cannot be dislodged by Pippins without the use of the hammer-like removal tool 80 as described in the Pippins reference itself.

By contrast, Applicants’ claimed invention operates to decouple the first and second components upon removal of the locking pin (in the free position) from the aligned passages without the requirement to use a hammer-like removal tool 80 required to be used according to Pippins. See, for example, the above-quoted paragraph [0066] of Applicants’ specification originally filed.

In view of the foregoing deficiencies of Pippins, Applicants respectfully submit that independent claims 1 and 39 (reciting that when the locking pin is in the locked position, the claimed apparatus and method are such that the locking position operates to (1) “prevent withdrawal of the locking pin from the aligned passages” and (2) “prevent separation of the components”) are patentably distinguished over Pippins.

Also, by virtue of their dependency, all claims depending from independent claims 1 and 39 are likewise patentably distinguished over Pippins.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-4, 7, 9-13, 19 and 31-43 as being anticipated by Pippins under 35 USC § 102(e) together with a written indication of the same.

Conclusion

In accordance with the foregoing, it is respectfully submitted that the application is in condition for allowance and a written indication of the same is earnestly solicited.

If any issues remain to be resolved, the Examiner is respectfully requested to contact the undersigned attorney so that any remaining issues (if any) may be promptly resolved to secure allowance of the subject application.

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Date: June 19, 2008

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Attachments:

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Respectfully submitted,

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